

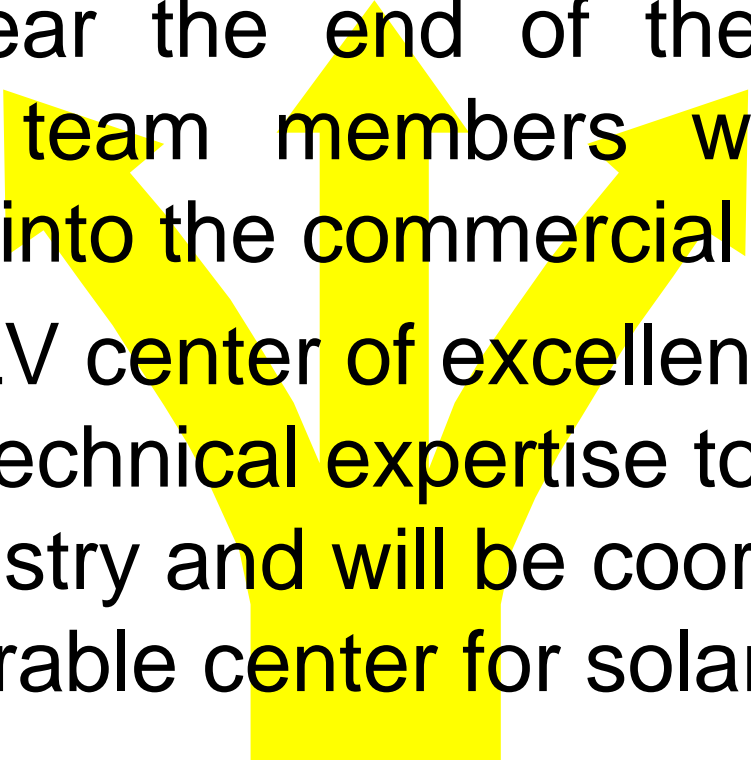
The UNLV Dish Stirling Project



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Overarching Project Goals



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- At or near the end of the project, the industry team members will be selling systems into the commercial marketplace.
 - The UNLV center of excellence will provide technical expertise to the solar dish industry and will be coordinated with a comparable center for solar hydrogen.

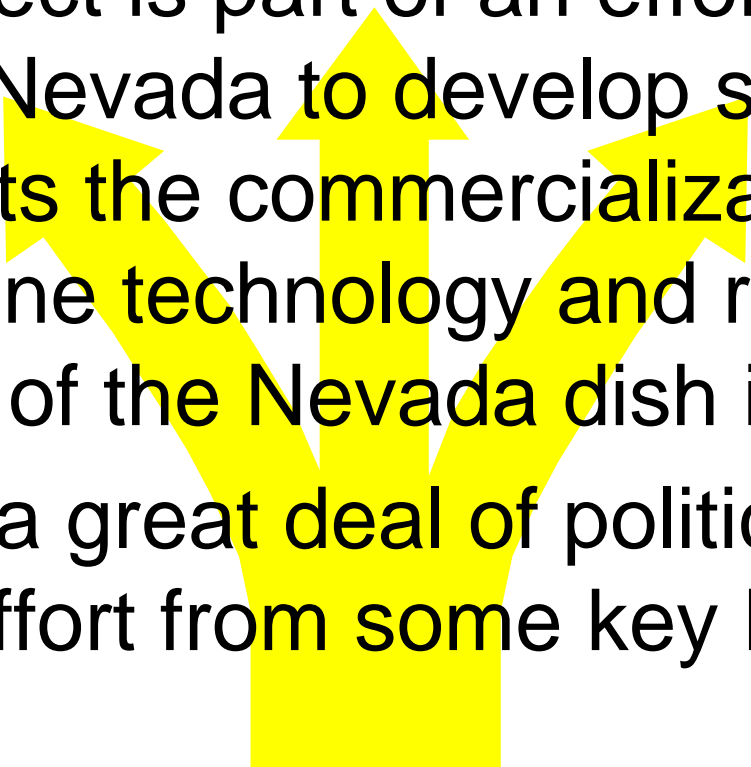
Specific UNLV Objectives



- To develop a facility that includes two dish-Stirling power generation systems.
- To operate the systems and feed the power into the Nevada Power grid.
- To train students in the operations, maintenance, and technology improvements of these systems.
- To perform operational system enhancements as may be appropriate.

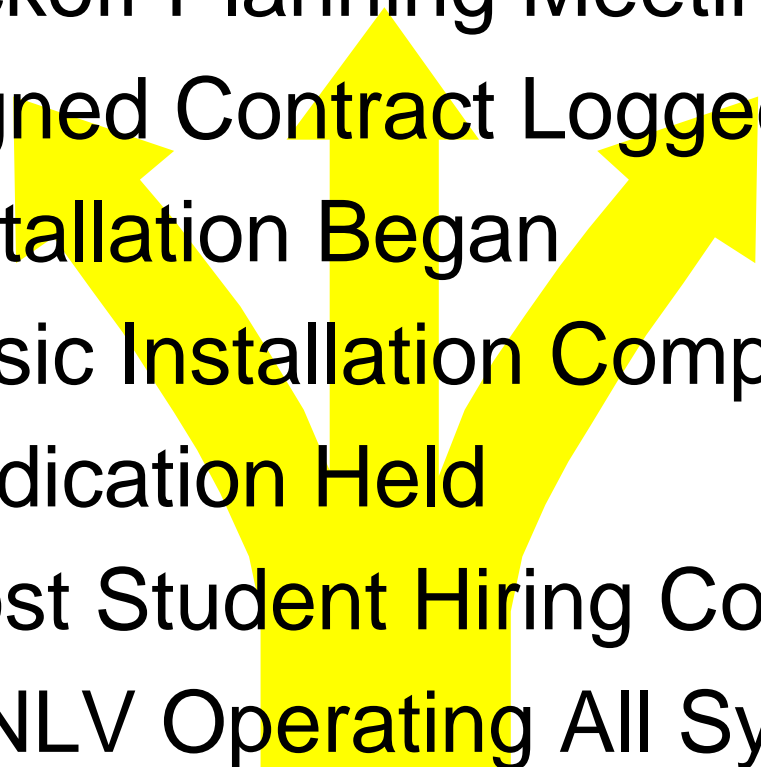
Political Factors



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- This project is part of an effort within the State of Nevada to develop solar energy. It supports the commercialization of dish/engine technology and represents the first step of the Nevada dish initiative.
 - There is a great deal of political support for this effort from some key Nevada people.

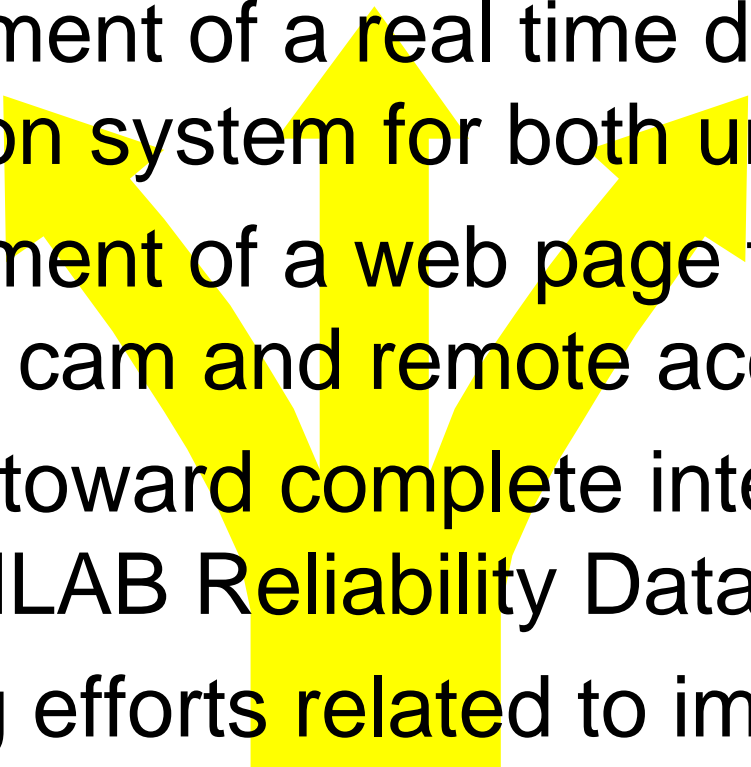
Summary of Events to Date



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- 4/17 Kickoff Planning Meeting at UNLV
 - 4/18 Signed Contract Logged at UNLV
 - 5/14 Installation Began
 - 8/13 Basic Installation Completed
 - 8/24 Dedication Held
 - 9/11 Most Student Hiring Completed
 - 11/01 UNLV Operating All Systems

Efforts Currently Underway



- 7-day-a-week operation and reporting.
 - Development of a real time data acquisition system for both units.
 - Development of a web page for the project with web cam and remote access.
 - Working toward complete interaction with the SUNLAB Reliability Database.
 - Modeling efforts related to improving overall performance.
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The Systems



The Students



Conclusions

- Two dish Stirling systems (units from SAIC and SES) have been installed and are operable at UNLV. Rated power 48 kW.
- Power is fed into the Nevada Power grid.
- Eleven students have been trained to operate the systems seven-days-a-week.
- Several technology enhancements are underway, including improved system monitoring and on-line data presentation.